

Attorney Docket No.: 5649.1168
Application Serial No.: 10/695,061
Filed: October 28, 2003
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REMARKS

This response is submitted in reply to the Office Action dated July 18, 2005 ("the Action"). Claims 1-7, 27-35 and 37-40 are pending in the application. Applicant hereby requests further consideration of the present application in view of the amendments above and the comments that follow.

I. Allowed Claims

Applicants acknowledge, with appreciation, the Examiner's statement that Claims 1-7, 30 and 34 are allowed.

II. The Drawing Objection and the Claim 40 Rejection

The Examiner objects to the drawings for failing to illustrate the bottom surface of the gate electrode contacting the semiconductor substrate as recited in Claim 40. To address this rejection, Applicants have amended Claim 40 above. Claim 40 now recites:

The self-aligned contact structure of Claim 37, wherein the silicon nitride liner contacts the self-aligned contact pad at the bottom portion of each gate electrode abutting an interior liner thereat to define a thicker covering at the bottom portion of the gate electrode than other parts thereof.

Accordingly, Applicant respectfully submits that the drawing objection and the rejection of Claim 40 has been obviated and as no art has been applied to Claim 40, Applicant submits that Claim 40 recites allowable subject matter.

III. The §102 Rejections

The Action rejects Claims 27-29, 31-33, 35, and 37-39 as being anticipated by or obvious based on U.S. Patent no. 6,294,449 to Wu. ("Wu") or U.S. Patent No. 6,284,596 to Sung et al. ("Sung"). Applicant respectfully disagrees with this rejection; however, in order to advance prosecution, Applicant has canceled Claims 27-29, 31-33 and 35 above without prejudice to pursuit of this subject matter in a future continuation application.

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The Action states that Claims 37-39 are anticipated by Sung. Applicant respectfully disagrees. Independent Claim 37 recites:

A self-aligned contact structure comprising:
two adjacent gate electrodes on a substrate, each gate electrode having a top portion narrower than a bottom portion;
a silicon nitride liner covering each gate electrode; and
a self-aligned contact pad between the adjacent two gate electrodes to be electrically connected to the substrate between the adjacent two gate electrodes, the self-aligned contact pad protruding from a top surface of each gate electrode.

Applicant respectfully submits that Sung fails to teach or suggest at least the emphasized feature noted above. Sung explicitly states that "[a]s another important step of the present invention, oxide spacers 190 are formed as shown in FIG. 2H" (col. 7, lines 45-48). Thus, in Sung, sidewalls of the gate electrode 160 are protected by the oxide spacer 190, not by a silicon nitride layer as claimed.

Applicant submits that Claims 38-39 are patentable for at least depending from a patentable base claim. Applicant also submits that Claims 38-39 recite independently patentable subject matter.

CONCLUSION

Accordingly, Applicant submits that the present application is in condition for allowance and the same is earnestly solicited. The Examiner is encourage to telephone the undersigned at 919-854-1400 for resolution of any outstanding issues.

Respectfully submitted,

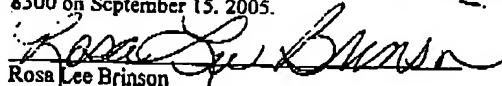


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CERTIFICATION OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office via the central facsimile number 571-283-8300 on September 15, 2005.



Rosa Lee Brinson